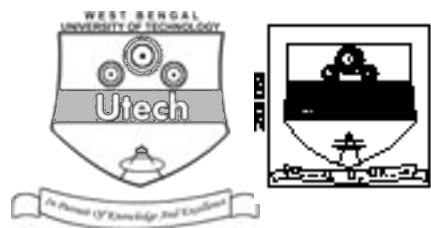


CS/B.PHARM (SUPPLE)/SEM-8/PT-803A/09
ADVANCED PHARMACOLOGY (SEMESTER - 8)



1.
Signature of Invigilator

2.
Signature of the Officer-in-Charge

Reg. No.

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Roll No. of the Candidate

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CS/B.PHARM (SUPPLE)/SEM-8/PT-803A/09
ENGINEERING & MANAGEMENT EXAMINATIONS, JULY – 2009
ADVANCED PHARMACOLOGY (SEMESTER - 8)

Time : 3 Hours]

[Full Marks : 70

http://www.makaut.com/

INSTRUCTIONS TO THE CANDIDATES :

1. This Booklet is a Question-cum-Answer Booklet. The Booklet consists of **32 pages**. The questions of this concerned subject commence from Page No. 3.
2. a) In **Group – A**, Questions are of Multiple Choice type. You have to write the correct choice in the box provided **against each question**.
 b) For **Groups – B & C** you have to answer the questions in the space provided marked 'Answer Sheet'. Questions of **Group – B** are Short answer type. Questions of **Group – C** are Long answer type. Write on both sides of the paper.
3. **Fill in your Roll No. in the box** provided as in your Admit Card before answering the questions.
4. Read the instructions given inside carefully before answering.
5. You should not forget to write the corresponding question numbers while answering.
6. Do not write your name or put any special mark in the booklet that may disclose your identity, which will render you liable to disqualification. Any candidate found copying will be subject to Disciplinary Action under the relevant rules.
7. **Use of Mobile Phone and Programmable Calculator is totally prohibited in the examination hall.**
8. You should return the booklet to the invigilator at the end of the examination and should not take any page of this booklet with you outside the examination hall, **which will lead to disqualification**.
9. Rough work, if necessary is to be done in this booklet only and cross it through.

No additional sheets are to be used and no loose paper will be provided

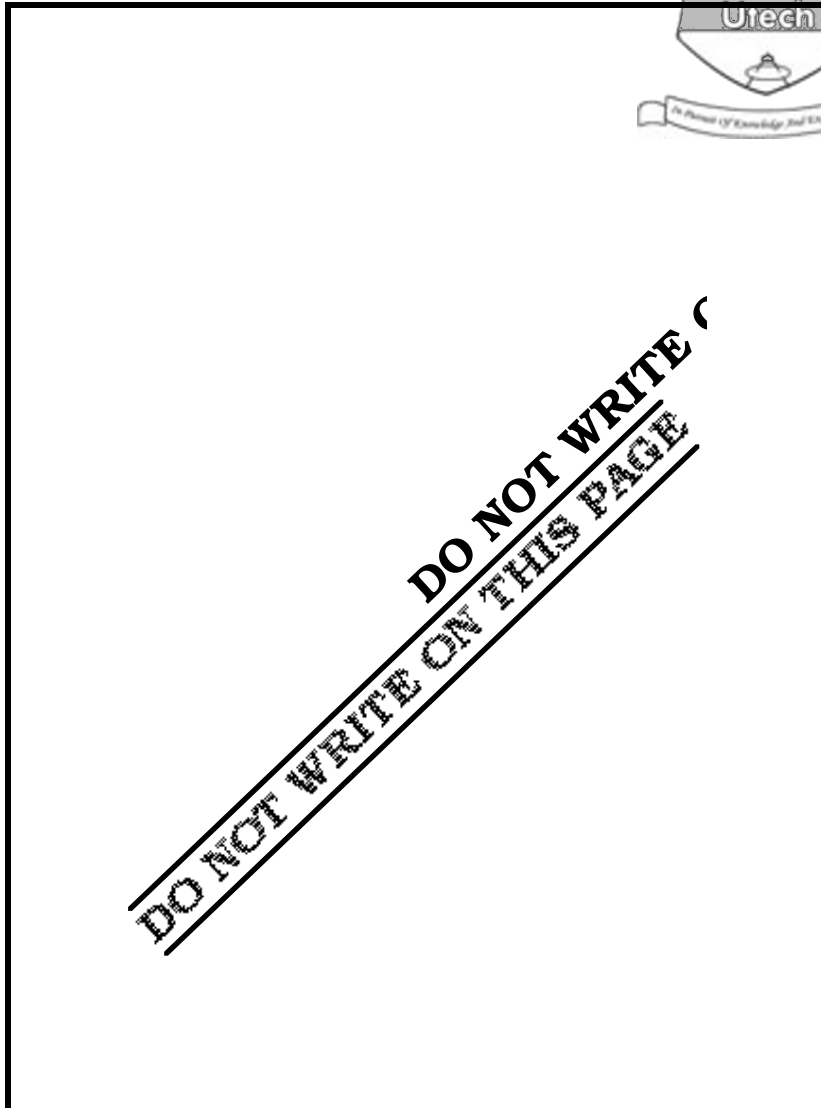
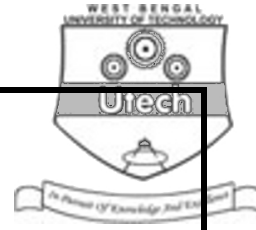
FOR OFFICE USE / EVALUATION ONLY

Marks Obtained

Question Number	Group – A					Group – B					Group – C					Total Marks	Examiner's Signature
Marks Obtained																	

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Head-Examiner/Co-Ordinator/Scrutineer

S-53018 (28/07)



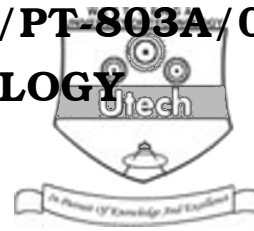
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S-53018 (28/07)

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CS/B.PHARM (SUPPLE)/SEM-8/PT-803A/09
ADVANCED PHARMACOLOGY
SEMESTER - 8



Time : 3 Hours]

[Full Marks : 70

GROUP – A**(Multiple Choice Type Questions)**

1. Choose the correct alternatives for any *ten* of the following : 10 × 1 = 10
- i) Which of the following drugs undergoes enterohepatic cycling ?
- | | | |
|---------------|-------------------|--------------------------|
| a) Cefuroxime | b) Rifampicin | |
| c) Gentamicin | d) Ciprofloxacin. | <input type="checkbox"/> |
- ii) An agonist has to the receptor.
- | | | |
|-------------------------------|------------------------------|--------------------------|
| a) only affinity | b) only efficacy | |
| c) both affinity and efficacy | d) no affinity and efficacy. | <input type="checkbox"/> |
- iii) Insulin receptors are
- | | | |
|----------------------------|--------------------------------|--------------------------|
| a) Channel receptors | b) G-protein coupled receptors | |
| c) Kinase-linked receptors | d) Nuclear receptors. | <input type="checkbox"/> |
- iv) The different phases of the cell cycle are in the following order :
- | | | |
|-------------------------------|-----------------------------|--------------------------|
| a) G_0 , G_1 , S, G_2 M | b) G_2 G_1 , S, M | |
| c) S, M, G, G_2 | d) M, G_0 , G, S, G_2 . | <input type="checkbox"/> |
- v) IL-2 is a/an
- | | | |
|---------------------|----------------------|--------------------------|
| a) Immunostimulant | b) Immunosuppressant | |
| c) both (a) and (b) | d) Immunomodulator. | <input type="checkbox"/> |

S-53018 (28/07)



vi) Parkinson's disease is characterized by

- a) muscle rigidity b) tremor
c) shuffling gait d) all of these.



vii) Nuclear receptors are

- a) extracellular protein b) membrane-bound protein
c) intracellular protein d) none of these.

viii) Levodopa is used to treat

- a) Alzheimer's disease b) Parkinson's disease
c) Both (a) and (b) d) None of these.

ix) Immunosuppressant action of Cyclosporine is due to

- a) activation of natural killer (NK) cells
b) increased catabolism of IgG antibodies
c) inhibition of the gene transcription of interleukins
d) interference with antigen recognition.

x) Which is not 2nd messenger ?

- a) cAMP b) IP₃
c) Ca⁺⁺ d) G-protein.

xi) Hallmark of myasthenia gravis is

- a) muscle rigidity b) tremor
c) muscle weakness d) language problem.

xii) Viral infection will stimulate

- a) cell-mediated immunity b) humoral immunity
c) both of these d) none of these.

**GROUP – B****(Short Answer Type Questions)**Answer any *three* of the following.

3 × 5 = 15

2. Define receptor. Classify receptors. Write in brief about ion-channel receptors.
3. What do you mean by bio-assay ? Mention its advantages and disadvantages. Describe the principle of bio-assay.
4. Define biotransformation of a drug. What is the significance of drug biotransformation to expel the drug from the body ?
5. Describe the primary features of cell-mediated immunity and humoral immunity.

GROUP – C**(Long Answer Type Questions)**Answer any *three* of the following.

3 × 15 = 45

6. Define immunomodulators. Classify the drugs used as immunosuppressive agents. Write down the immunosuppressive mechanism of cyclosporine and glucocorticoids.
7. Discuss in detail about Insulin, Oxytocin and Progesterone bio-assays.
8. Discuss the neurochemical imbalance in Alzheimer's disease. Briefly explain the management of Parkinson's disease.
9. Write briefly about the G-protein and second messenger control of cellular effector systems.
10. What is apoptosis ? Write in brief about the main signalling pathways in apoptosis. What is the role of apoptosis in immune system and in cancer ?
11. What is drug interaction ? Describe about pharmacokinetics drug interactions in our body.

END

S-53018 (28/07)